

State Innovation Model Testing Awards From the Centers for Medicare & Medicaid Services Innovation Center: Highlighting Rural Focus

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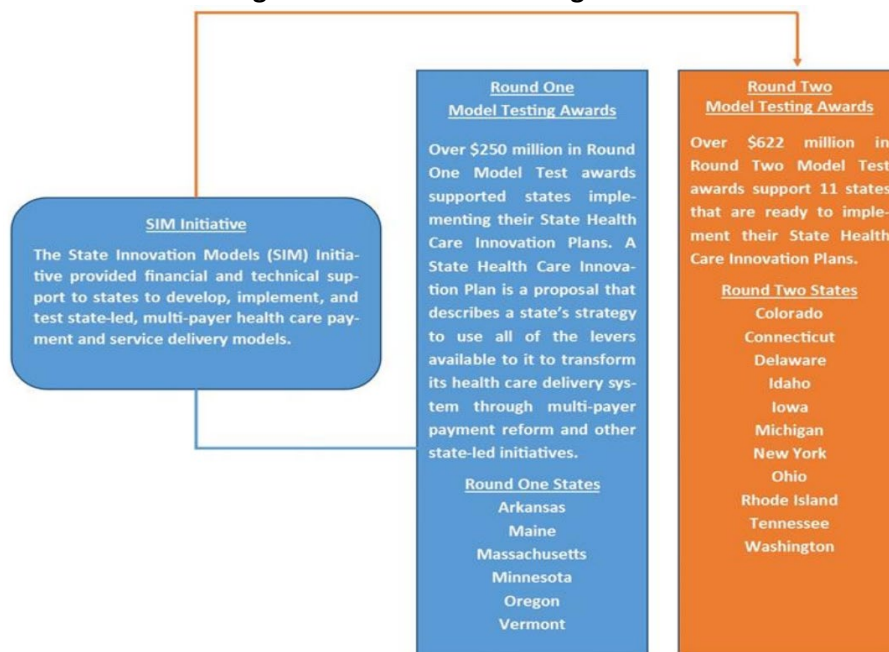
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INTRODUCTION

The Centers for Medicare & Medicaid Services Innovation Center established the State Innovation Models (SIM) initiative in 2012 to support states that are committed to designing and “pre-testing” strategies for health system transformation, or testing delivery and payment models newly implemented in their states. The aim of the SIM initiative was to test and promote multi-payer models for providing patient-centered care, improving care quality, and slowing the projected growth of costs in Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP).¹ SIM efforts rested on the unique capacities and authorities of the states under special Medicaid waivers, and their ability to coalesce key stakeholders into the innovation effort.² In round one of the initiative that began in 2013, the Innovation Center awarded over \$250 million in model test awards to six states to assess state-level models for multi-payer payment and delivery system transformation as proposed in the states’ previously designed State Health Care Innovation Plan. In round two beginning in 2014, an additional 11 states received \$620 million for that same purpose.³ Innovation plans specifically included multi-payer delivery and payment models, efforts to improve the quality of services including health IT, evidence-based investments, workforce capacity expansion, enabling policy mechanisms, and effective evaluation.⁴

This paper updates a previously published report (July 2017 and March 2022) summarizing activities and accomplishments of six states – Arkansas, Colorado, Idaho, Oregon, Minnesota, and Vermont – whose SIM plans included testing efforts specifically targeting rural areas. This June 2022 version provides information on five additional states: Iowa, Maine, Michigan, New York, and Ohio. In some of the state summaries, the rural efforts are specified, while in others, rural efforts are included in broader statewide efforts. The Rural Health Value team draws the reader’s attention to rural-relevant themes across the eleven state SIM efforts described: primary care transformation, including health care homes and behavioral health integration with primary care; and collection and exchange of patient information for care integration, coordination of services, and monitoring of quality.

Figure 1 – SIM Model Testing Awards



ARKANSAS (ROUND 1, \$42 MILLION)

FEBRUARY 2013 – SEPTEMBER 2016

GOALS

The Arkansas State Innovation Model (SIM) sought to ensure access to services in medically underserved rural communities by increasing technical capacity and the number of providers.

APPROACH

Arkansas received its SIM grant in February 2013 and used the funds to implement its State Improvement Plan over 42 months. The Arkansas model emphasized patient-centered medical homes (PCMHs) as the hub of comprehensive care, value-based payments that included performance-based coordinated care fees, and graduated payments that reflected the assessed needs of the patient along with cost-control mechanisms that still ensure quality care for consumers.

The Arkansas model was a statewide, comprehensive approach to meet the needs of its population, which is heavily rural. The plan incorporated longstanding state-level goals for rural health, including ensuring access to services and increasing technical capacity and the number of providers in medically underserved rural communities. These goals incorporated streamlined episode-based payment innovations that rewarded the achievement of target outcomes, particularly quality and cost-level benchmarks, with the goal of sustainability for rural providers. Additionally, the State committed to workforce development through increased recruitment and retention of providers to rural regions and promoting technical capacity building among rural providers to promote the adoption of team-based models. For providers that were too small to qualify as PCMHs, Arkansas allowed practices to pool voluntarily to meet the minimum patient panel of Medicaid beneficiaries. Arkansas also promoted the adoption of new health information technology (HIT) and improvements to the State's HIT infrastructure to further increase the quality and cost-effectiveness of rural care.⁵

Arkansas supported its reform model through adoption of four broad based strategies:

1. Delivery system and payment reforms
2. Behavioral health integration
3. Quality measurement and reporting
4. Population health

Delivery system and payment reforms

The state's SIM efforts initially focused on developing three main models of care delivery and payment: physical and behavioral episodes of care (EOCs), PCMHs, and health homes to provide care coordination for individuals who use long-term services and supports and with developmental disabilities and serious mental illness. PCMHs and EOCs were designed to act synergistically – with the PCMH model focused on efficient provision of primary care services and care management, and the EOC model used for value-based purchasing of both primary and specialty services. The SIM initiative in Arkansas changed payments for the majority of primary and specialty health care providers in the state in ways that promoted team-based care and care coordination. The payment changes resulted in providers changing their practice patterns and/or staffing structures.⁶

Retrospective Episode-of-Care Base Payment

The retrospective EOC payment model is one of the reform payment models implemented in Arkansas, where the Principle Accountable Providers (PAPs) were liable for quality and cost outcomes associated with each episode of care. Through a retrospective payment system, PAPs were given shared savings bonuses or assessed a penalty if the cost and quality outcomes were worse than other PAPs.

- Medicaid provided incentivized payments for coordinated, team-based care for specific conditions and procedures, under the leadership of a designated principal accountable provider.
- Medicaid participated in all episodes of care; commercial payers participated only in those episodes with the greatest impact on their enrollee populations.
- Payments reflected the assessed level of need for each special needs population's enhanced services.
- The State developed prospective, assessment-based institutional services for people with developmental disabilities and physical disabilities requiring long-term services and supports.

Population-Based Care Delivery

Population-based care through a PCMH model was designed to account for the state's different types of primary care in order to increase access to care and patient care coordination.

- The SIM plan aimed to provide a majority of Arkansas residents with access to PCMHs to provide team-based, comprehensive care with a focus on chronic care management and preventive services.
- PCMHs specifically aimed to reduce ambulatory ER visits, inpatient admissions, and readmissions.
- Capitated fees and shared savings held physicians responsible for the health of their entire Medicaid population.
- Payments included performance-based care coordination fees and shared-value/quality-based fees.

Health Homes

- Individuals with complex/special health needs were provided access to health homes that coordinated with their medical homes to provide medical and wraparound services, with 24/7 access.
- The State implemented an incentivized payment structure based on outcomes, evidence-based practices, and wellness promotion.
- Capitated fees were included to pay for care coordination.

Behavioral Health Integration

In the Arkansas behavioral health model, individuals with serious mental illness or serious emotional disturbance received coordinated care through behavioral health homes, while those with less serious mental health problems received PCMH-coordinated medical and behavioral services. Health homes developed integrated plans to coordinate mental health and substance use disorder treatment, LTSS, and medical services.⁷ Behavioral Health home and PCMH models tied payments to metrics for achieving behavioral health integration.⁸

Quality Measurement and Reporting

PCMH practices receive quarterly reports outlining their performance on process measures, quality measures, number of beneficiaries enrolled, and total costs. The Arkansas SIM initiative required PCMHs

to participate in the EHR Meaningful Use Incentive program, further improving their capacity to report quality metrics.

Population Health

The Arkansas SIM office, in collaboration with Arkansas Department of Health (ADH), developed state health improvement plans and metrics for evaluating them by focusing on three major health issues for Arkansas.⁷

- Short life expectancy
- High infant mortality
- Low health literacy

The metrics used to evaluate the health improvement plans included reducing tobacco use, diabetes, obesity, hypertension, substance use, and increasing health literacy. As of the date of this report, the state did not have any results to report due to challenges with developing definitions for population health and sharing of responsibilities between Medicaid and ADH.⁵

RESULTS

The Arkansas SIM initiative led to changes in the health system and succeeded in its goals of reforming the system and making it viable for the long-term. The outcomes of the delivery system and payment reform were:⁵

- More than 80 percent of eligible Medicaid beneficiaries were attributed to a PCMH
- Primary care providers, specialists, and community-based service providers worked together to improve patient care coordination, and to meet patient needs and preferences.
- All-cause acute inpatient admissions declined for both commercial insurance and Medicaid beneficiaries.
- Improved care coordination and health quality obtained through PCMH and EOC models reduced unnecessary and inefficient care and reduced the growth in health care costs.
- As of first quarter 2015, 14 retrospective episodes of care had been implemented with an additional 10 in development. The initial benchmark of 50 episodes was determined to be an unrealistic goal for the first 2-3 years of the initiative.
- 2,200 (41 percent) of active patient care physicians have received EOC payments as of December 2018.
- Payers included Medicaid, Blue Cross Blue Shield, and QualChoice.
- 637 primary care physicians (representing 179 practices) were incentivized to save costs.

COLORADO (ROUND 2, \$65 MILLION)

FEBRUARY 2015 – JANUARY 2019

GOALS

The Colorado State Innovation Model (SIM) sought to transform primary care practices by integrating physical and behavioral health care services in coordinated systems, with value-based payment structures, for 80 percent of residents by 2019. The Colorado model, called the Colorado Framework, focused on integrated physical and behavioral health as a means to achieve increased access to care, improved health outcomes through quality, and reduced costs.

APPROACH

To accomplish the model's goals, Colorado used SIM funds to improve the state's health care infrastructure. The plan improved the technical capacity of rural providers to transform practices by taking full advantage of advances in information technology and by adopting team-based care models.

The SIM office convened a workgroup dedicated to health care payment reform in rural areas of Colorado. The workgroup included representatives from commercial and public payers, the Governor's office, hospitals, business community, and other stakeholders. The SIM office partnered with the Colorado Department of Health Care Policy and Financing and the Colorado Hospital Association to model fixed budgets for struggling rural hospitals.

More than 300 Primary Care Practices across the State of Colorado in three cohorts participated in practice transformation to integrate behavioral health and primary care services, and to prepare for value-based payment arrangements with payers. The first cohort of 100 practices launched in March 2016. The second cohort of 156 practices was launched in September 2017, and the third cohort of 88 practices was launched in June 2018. Of those, 92, 144, and 83 practices from each cohort, respectively, completed the SIM program. Thirty percent of the 319 completing practices were defined by the state to be rural.⁸

The state focused on a "four pillar" approach to increase access to integrated care in coordinated systems supported by value-based payments. The "four pillars" are:

1. Payment Reform
2. Practice Transformation
3. Population Health
4. Health Information Technology (HIT)

Payment Reform

The state recognized the need to shift payment models away from fee-for-service to those that reward value in order to sustain patient access to integrated, whole-person health care. The SIM office worked with payers to expand the Alternative Payment Model (APM) Framework. The guiding principle of the APM Framework was to drive a shift toward shared-risk and population-based payment models, in order to incentivize delivery system reforms that improve the quality and efficiency of patient-centered care. The SIM Office engaged seven private and public payers in a multi-payer collaborative to implement at least one value-based payment model for each of the participating primary care practices. The SIM office allowed the payers flexibility in designing the payment models to reflect the changing landscape in

payment models. They believed that empowering practices by focusing on developing their own skills to negotiate with payers would be more valuable in the long-term than setting up a SIM-specific APM.⁹

An evaluation workgroup surveyed practices to explore their level of preparedness for alternative payment methods. The survey also asked practices to assess the degree to which the implementation of value-based payments influenced improvements in practice-level outcomes such as quality and access to care.

The survey and subsequent actions of the workgroup generated recommendations for elements of any value-based payment strategy:

- Maintain five key primary care functions (Access/Continuity; Care Management; Comprehensiveness/Coordination; Patient/Caregiver Engagement; and Planned Care and Population Health).
- Require the use of Certified Electronic Health Records Technology.
- Align and simplify measures and data aggregation efforts.
- Base performance-based incentive payments on patient experience, clinical quality, and improved outcomes and utilization.
- Advance the use of technology at the point of care to support a focus on outcomes.
- Continue practice transformation technical assistance for providers.

The SIM office conducted evaluations to determine whether the implementation of payment reforms within certain value-based payment categories influenced outcomes.

Practice Transformation in Primary Care

Participating primary care practices were matched with a Practice Facilitator and a Clinical HIT advisor to guide and support integration and practice transformation. Practices were also matched with SIM-funded regional health connectors (RHCs) who helped connect practices with resources in their communities. The SIM office established a set of practice site program targets for Clinical Quality Measures (CQM) including depression screening, alcohol and drug screening, tobacco use screening, hemoglobin control, hypertension management, adult obesity screening, and asthma medication management.¹⁰

In addition to supporting practice transformation in primary care practices, the SIM office launched an innovative bi-directional health home effort in Colorado:

- The pilot program created integrated health homes in four Community Mental Health Centers (CMHCs) across the state.
- CMHCs provide comprehensive behavioral and physical health care to stabilize and manage illness and support recovery.

Population Health

The SIM office supported community efforts to reduce stigma, promote coordination of primary care and public health, reduce barriers to accessing integrated physical and behavioral health care, and connect clinical and community supports.

The Population Health Workgroup issued a call to action to improve behavioral health awareness and guided SIM efforts to improve health outcomes at the community and population level.⁸ Working with SIM leadership, they identified a set of population health measures to track over the course of the SIM

effort. Measures data were collected using a representative statewide survey and covered health issues such as depression, substance use, obesity, diabetes, maternal depression, suicide death rates, injuries, death from falls, and early childhood screening.

The SIM office supported community-based mental health efforts to raise awareness, reduce stigma and promote health through grants to eight local public health agencies and two behavioral health transformation collaboratives.

The SIM's Regional Health Connector Program created clinical-community linkages in rural areas. An RHC is a program that sought to improve the health of Colorado populations by connecting residents to health systems. RHCs brought medical professionals to rural areas to build local coalitions to address opioid misuse. They also facilitated partnerships between providers and community organizations especially in rural and underserved areas.

Health Information Technology

The SIM office built a sustainable health information system that provided a strong foundation for future HIT efforts in rural areas. It supported the development of the Shared Practice Learning and Improvement Tool, an electronic CQM reporting solution. It also:

- Partnered with a multi-payer collaborative to provide SIM practices access to Stratus, a data aggregation tool designed to provide care teams access to patient-centered insights.
- Funded the development of the VISION Tool that allowed users to better identify and understand issues related to social determinant of health.
- Funded two health systems in rural areas to accelerate provision of whole-person care through use of health information technology.
- Expanded access to broadband communication and carried out a telehealth strategy focused on electronic consultations (e-consults).

RESULTS

Accomplishments across the four pillars include:

- More than 85 percent of participating practices, including those in rural areas, indicated that the SIM office assisted the practice site's improvement in the integration of behavioral and physical health care.
- All required SIM measures were reported by 95 percent of SIM practice sites.
- Broadband capability was expanded by 203 sites across the state by September 2018.
- Grants to integrate care were awarded to 85 primary care practice sites.
- Most providers (81 percent) agreed that access to APM helped them achieve their practice transformation goals.
- Analysis of practice transformation factors and changes in CQMs showed statistically significant improvement in 6 of the 14 practice-site-reported CQMs during SIM participation.

IDAHO (ROUND 2, \$40 MILLION)

FEBRUARY 2015 – JANUARY 2019

GOALS

The state of Idaho received funding under the second round of the SIM initiative. Idaho aimed at achieving a statewide transformation of the health care system through the establishment of Patient-Centered Medical Homes (PCMH).¹¹ The PCMH is a model of delivery of primary health care services in an efficient and integrated manner. Health care providers practicing under this model use decision support tools, engage patients in their own care, and can measure their performance and conduct activities for quality improvement as per patients' needs.¹² This new transformation was intended to establish efficient and integrated primary care services for the residents of Idaho in a cost-effective manner.

APPROACH

The Idaho SIM included four specific aims:

1. Achieving a statewide integrated, efficient and coordinated system of health care delivery through practice transformation with the help of PCMHs.
2. Supporting health care providers with expanded connectivity through electronic health information exchange and creation of a health data infrastructure.
3. Reducing health care spending and enhancing the use of Value-Based Payment (VBP) models for reimbursement of practitioners throughout Idaho.
4. Sustaining the PCMH model in clinical practices throughout Idaho.

Practice transformation

Idaho Practice transformation activities included provision of technical assistance and training to primary care practitioners to help them achieve recognition as a PCMH*. Idaho introduced virtual PCMH certification alongside a traditional PCMH track to support locations with limited resources and to engage rural practitioners. The certification was used to support rural and frontier areas requiring integration of telehealth and community health workers. SIM-funded technical assistance included coaching calls, collaborative learning sessions, webinars, a peer mentorship program, and an online portal. Training was also provided to further enhance the capabilities of already established PCMH practices.¹³ By the end of the test model, the state aimed to build 180 nationally recognized PCMH practices, including 75 Virtual PCMHs.

Electronic Health Exchanges & Health data infrastructure

To expand practice connectedness Idaho used the existing Idaho Health Data Exchange (IHDE) and invested in enhancing that capacity. The increased investment in technical assistance provided opportunities to PCMH providers to better connect with extended care teams, including specialists and hospital-based service providers.^{13,14}

Enhanced payment arrangements & health care spending

Improvements in Idaho's payment model were not originally designed as part of the SIM initiative. Payment advancements happened due to the changes Medicaid brought through its Healthy

*Idaho PCMH certification used national recognition requirements (NCQA) with state-specific metrics to meet the unique needs of their practices and patients.

Connections payment model implemented in 2016.¹⁵ Under Healthy Connections, reimbursement was based on the PCMH capabilities of providers with higher payments given to providers belonging to higher PCMH “tiers”. Providers could obtain better payment rates by moving to higher tiers by adding PCMH capabilities such as an IHDE connection. The SIM initiative helped clinics develop advanced PCMH capabilities resulting in higher tier levels of reimbursement.¹⁶

Sustainability of the efforts

The Healthcare Transformation Council of Idaho (HTCI) was established in 2019 to help sustain the transformation efforts that began under the SIM Initiative and to promote the growth of the PCMH model. The HTCI’s goal is to increase the proportion of value-based payments in Idaho from 29 percent to 50 percent by 2023, and to provide leadership and coordination to continue Idaho’s VBP payment transformation.**Error! Bookmark not defined.** Although, the HTCI planned to continue promoting person-centered health care delivery system, no future PCMH cohorts were planned.**Error! Bookmark not defined.**

RESULTS

Idaho’s practice transformation activities included provision of technical assistance, training and IHDE connectivity to primary care practitioners. Clinics throughout Idaho were transformed into PCMHs or enhanced their PCMH capabilities. Specifically, Idaho was successful in engaging 165 clinics to develop or enhance their PCMH capabilities. Additional training was provided to 107 community health workers (CHWs), and 13 new community health emergencies medical services (CHEMS) were established. Through investment in CHWs and CHEMS, Idaho was able to provide patient-centered care in rural and frontier communities who had been overlooked by previous transformation models.¹³ Efforts were made to share best practices and expand health care coordination resulting in the state recognizing 48 clinics as virtual PCMHs. The PCMHs that received support showed a positive impact on outcomes for adult beneficiaries (e.g., a decrease of 11.21 inpatient admissions per 1,000 adult Medicaid beneficiaries compared to patients assigned to non-participating clinics) (see figure 1).

By the end of the award period, most of the participating providers were connected to the IHDE and were able to use data from that system to improve patient care. Due to these improvements, 154 PCMH providers (approximately 93%) were able to exchange data electronically with the IHDE. In addition, 111 practices were able to establish a stable bi-directional connection to share data with other institutions and health care providers. Although providers were able to use the IHDE data to improve individual patient care, the data system lacked the ability to produce reports useful for quality improvement activities.¹³

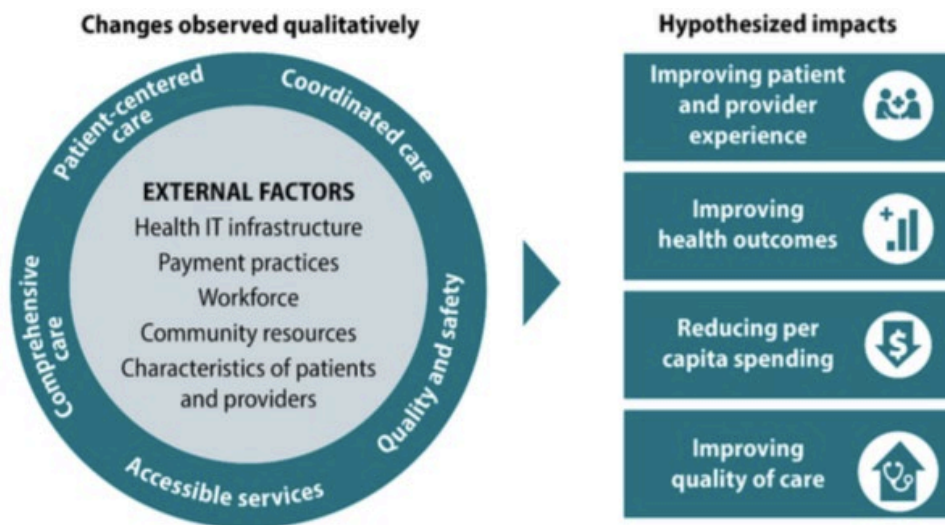
With the help of Medicaid’s distinct Healthy Connection payment model, the SIM initiative was able to build the capabilities of providers through technical assistance and facilitating health information technology, resulting in advanced PCMH practices and better reimbursement, resulting in increasing VBP usage, as measured by percent of covered lives and of all payments made through VBP.¹⁶ For example, in 2019, the state reported that across all payers, 90.9 percent of covered beneficiaries were served by a provider reimbursed through a VBP model compared to 58.1 percent in 2015. Similarly, 37.8 percent of all payments were made through VBP in comparison to 24 percent previously.¹⁶

Analysis of claims data showed a decrease of 11.2 inpatient admissions per 1,000 adult Medicaid beneficiaries assigned to participating clinics during the first two years of implementation compared to those assigned to non-participating clinics. Similarly, a decrease of 108 ED visits per 1,000 adult

beneficiaries in the practice transformation support group was observed during the first two years of implementation in comparison to non-participating practices.¹⁵

After the award period, Idaho did not recruit more primary care practices to participate in PCMH transformation and instead focused primarily on VBP expansion.¹² Challenges with health IT also persisted throughout the SIM Initiative. Although most participating practices were connected to the IHDE by the end of the award period and PCPs were using that data to improve patient care the quality of the IHDE data was found to be insufficient to enable statewide data analytics.¹³

Figure 1: Modified Agency for Healthcare Research and Quality framework for evaluating patient-centered medical home effectiveness



Source: AHRQ (Agency for Healthcare Research and Quality, 2013, March). *The medical home: What do we know, what do we need to know? A review of the earliest evidence on the effectiveness of the patient-centered medical home model*

<https://www.ahrq.gov/sites/default/files/wysiwyg/ncepcr/tools/PCMH/the-medical-home-what-do-we-know.pdf>

IOWA (ROUND 2, \$43.1 MILLION)

OCTOBER 2015 – APRIL 2019

GOALS

Iowa's SIM Initiative focused on achieving statewide health care transformation. The program was directed under the theme "Iowans experience better health and have access to accountable and affordable healthcare in every community".¹⁷ The initiative had two primary drivers: (1) value-based payment reform, focused on aligning payers and providers in value-based purchasing (VBP); and (2) delivery system reform, directed at equipping providers with tools to engage in population health with a focus on outcomes.¹¹ The specific goals of Iowa's SIM initiative were:¹⁷

1. Reduce healthcare costs while improving quality with value-based payment models
2. To support and empower patients to be healthier
3. Increase the number of provider organizations financially successful in Alternative Payment contracts.

APPROACH

Iowa's SIM Initiative, under the direction of the Iowa Medicaid Enterprise (IME), was a collaborative effort between the Iowa Department of Public Health, and the Iowa Healthcare Collaborative (IHC, a statewide nonprofit organization focused on healthcare improvement).¹¹ The intent was to eventually use an accountable care organization (ACO) model of care for the entire (statewide) Medicaid population, with performance metric alignment across Medicaid, commercial payer, and Medicare ACO arrangements.¹¹

The Iowa SIM initiative focused on three classes of activity:

- Healthcare Delivery System Reform
- Payment Reform
- Technical Assistance

Healthcare Delivery System Reform

Iowa established Community and Clinical Care (C3),¹⁹ initiatives in seven communities (five of which were nonmetropolitan). C3s were designed to transform health care delivery by promoting care coordination across clinical, public health, and social service stakeholders. Their function was to develop and implement population-based, community-applied interventions; and, address social determinants of health through care coordination.²⁰ The SIM initiative also funded the Statewide Alert Notification (SWAN) system, which was designed to reduce rates of preventable readmissions and preventable emergency department (ED) visits.²¹ The SWAN system provided alerts from participating hospitals to providers and care teams when one of their patients had a hospital admission or an emergency department visit.²⁰ While SWAN provided utility in the service it delivered, it was eventually discontinued in favor of a private system that was viewed as more user friendly to providers.¹⁹

Payment Reform

Iowa's initial SIM payment reform focused on increasing the portion of Medicaid lives covered under a VBP agreement with the goal of covering 45 percent of that population.¹⁹ However, in 2015 the state shifted its Medicaid program to a managed care system. The original managed care plan had been built on the assumption of a direct relationship between the state and providers. That was reworked to

reflect the shift to a managed care system and VBP was implemented by leveraging contracts between IME and Managed Care Organizations (MCO's).¹¹

Technical Assistance

SIM technical assistance activities were focused at both the community and healthcare system levels.²⁰ The IHC and several subcontractors conducted a variety of technical assistance activities to healthcare providers including clinics, health systems, and pharmacists, and communities (particularly C3 communities). An array of strategies and venues was utilized including webinars, day-long conferences, staff training sessions, in-person workshops, and others. They also include "SIM Learning Community" events which provided education and training for all the stakeholders in ACO's, MCOs, and C3's in their roles in the SIM initiative.²⁰

RESULTS

Iowa's SIM initiative produced a number of important results:

- C3s were deemed as largely a success within the state. A key success for all of the C3s is the continued convening and engagement of their community-level steering committees and communication with their coalitions on a regular basis.²² C3s reported making progress in engaging their local health systems, particularly around the importance of social determinants of health in improving diabetes measures.¹¹
- The state attributed 58 percent of its Medicaid covered lives to a value-based purchasing contracted provider, exceeded its goal of 45 percent.¹¹ However, significant turnover of state MCO's was viewed as a setback for the VBP because it disrupted contracts and diverted focus from the state's goals.¹⁵
- Although the state's SWAN system was eventually replaced by a commercial package, it was judged a success in persuading providers of the importance of sharing data.¹⁵

MAINE (ROUND 1, \$33 MILLION)

OCTOBER 2013 – SEPTEMBER 2017

GOALS

Maine's State Innovation Model (SIM) award aimed to achieve the Triple Aim (improving patient experience, improving health of populations, and reducing cost) through contracts with organizations throughout the state with proven performance records in the state's "SIM Pillars":^{3,23}

- Payment reform
- Strengthening primary care
- Integrating physical and behavioral health
- Developing new workforce models
- Data analytics and reporting
- Consumer engagement

APPROACH

Maine was one of six states that received a three-year model testing award in 2013 – intended for states with fully developed proposals for state-wide health system transformation.²⁴ At the time of the award, Maine was engaged in a number of existing programs designed to reform health care payment and delivery systems and build the state's capacity to exchange health information. It had begun a state-wide multi-payer Primary Care Medical Home (PCMH) pilot program, had established a nonprofit state-wide Health Information Exchange (HIE), had a number of providers participating in Medicare and commercial-led accountable care organizations (ACOs), and had begun planning for the development of a Behavioral Health Home (BHH) program.⁵

Maine used its SIM funding to build on existing activities and to fund new initiatives to accelerate system change. The funding was largely used to support partner organizations to implement SIM activities (Maine used only one percent of SIM funds for state operations).⁵ SIM-funded activities fell under six broad categories:

1. Delivery system and payment model development
2. Data analytics and health IT
3. National Diabetes Prevention Program (NDPP) expansion
4. Quality measurement alignment and public reporting
5. Value-based Insurance Design (VBID)
6. Workforce development

Delivery system and payment model development

Prior to the SIM award, Maine had made efforts to change health care delivery and payment using a multi-payer approach. But the state chose to focus its SIM reform efforts on accelerating these changes among Medicaid providers.⁵ Three delivery and payment reform models were developed for MaineCare (the state's Medicaid program). In the first model, Health Homes (HHs) provide clinical care and serve as care coordinators for Medicaid beneficiaries with chronic illness or behavioral health conditions.²⁵ HHs could refer high-cost, high-risk patients to multidisciplinary community care teams to provide targeted case management and social support services.⁵ In the second model, HHs could partner with the state's Behavioral Health Homes (BHHs) – community-based Behavioral Health Organizations (BHOs) designed to improve health outcomes for adults with severe and persistent mental illness (SPMI) and children

with serious emotional disturbances (SED) through team based care coordination.²⁴ BHOs only became a BHH after meeting specific MaineHealth program participation requirements including state licensure, community-based organization, team-based model of care, and others.²⁶ Similarly, MaineHealth members were only able to enroll in BHH programs if they met diagnostic and functional criteria.⁵ In the third model, MaineCare used the ACO shared savings model to develop Accountable Communities (ACs). Beneficiaries are assigned to a provider organization which can earn shared savings contingent on meeting benchmarks for quality care.

Data analytics and health IT

Maine's state-wide non-profit Health Information Exchange (HIE) was established in 2010 and contained clinical data for the majority of Maine's residents.⁵ The state used SIM funds to connect BHHs to the HIE, provide technical assistance to providers on how to use HIE connections, produce performance feedback reports to practices, and enhance the system to provide real-time alerts of patients' ED and inpatient use to care managers.²⁵

National Diabetes Prevention Program expansion

One of Maine's SIM goals was to improve population health with efforts targeting prevention and improved management of diabetes. SIM funds provided resources to expand the number of NDPP sites and lifestyle coaches. The state also used SIM funding to develop the NDPP dashboard which provided online real-time tracking of NDPP class attendance and participant health outcome progress.⁵

Quality measurement alignment and public reporting

Maine used SIM funds to develop new provider quality and cost metrics to be reported on a public website.²³ Intended to align commercial and public payer performance metrics and reduce provider quality metric reporting burden, a work group reached consensus on 44 quality measures (mostly claims-based). Uptake of the measure set was voluntary across private payers.⁵

Value-Based Insurance Design

Maine worked with commercial payers in the state to set a voluntary growth cap on risk-adjusted per-person medical costs within commercial ACOs. VBI was an approach to health benefit plan design that incentivized consumers and providers to reduce cost while improving quality.⁵ Recognizing that health services have different levels of value, such plans reduced barriers to high-value treatments (through lower costs to patients) and discouraged low-value treatments (through higher patient costs).²⁷

Workforce development

SIM funds were used to implement a community health worker (CHW) pilot program that included training to define CHW's core competencies and role on care teams and their integration in primary care.²⁵ A long-term goal of the SIM-funded CHW activities was to develop a competent CHW workforce using a uniform, vetted core curriculum. By the end of the SIM's third year, 37 CHWs and 19 CHW supervisors had been trained under the initiative.⁵

RESULTS

Maine's SIM initiative pursued health system transformation with a number of initiatives. At the end of SIM funding, the state received a no-cost extension to continue its work, narrowing the focus to diabetes prevention and avoidable hospital readmissions. Other outcomes of the funding included:

- Providers and state officials viewed the BHH model as a success with providers observing that the capitated payment model gave them the flexibility to provide better care.⁵ Over 90 percent

of BHH providers rated their BHH intervention as very or somewhat effective at improving behavioral health.²⁴

- Prior to the SIM, behavioral health providers had lagged behind primary care providers in access to and use of data to manage patient care. The SIM initiative connecting behavioral health providers to the HIE was viewed as a great success. But it was also noted that exchange of data alone did not guarantee integration of primary and behavioral health care.⁵
- Uptake of the new provider quality and cost metrics was limited with commercial payers largely being unwilling to adopt the new measures set. This was attributed, in part, to the investment that the commercial payers had already made in developing their own measures for monitoring performance.⁵
- Uptake of the VBID initiatives was limited – particularly among commercial payers – and the state discontinued the activities in early 2016. Because the ACO growth cap was voluntary, its impact was also limited.⁵
- The CHW workforce pilot was largely considered successful. The financial investment in the model was minimal but the development of the CHW curriculum and set of core competencies was considered a significant return.⁵

MICHIGAN (ROUND 1, \$70 MILLION)

FEBRUARY 2015 – JANUARY 2020

GOALS

The objective of the Michigan SIM initiative was to help reinvent the state's health care system. Michigan's plan ("Reinventing Michigan's Health Care System: Blue for Health Innovation") specified six goals for the initiative:²⁹

1. Strengthen the primary care infrastructure
2. Provide care coordination for individuals requiring intensive support services
3. Build community capacity to improve population health
4. Improve systems of care
5. Design system improvements to reduce administrative complexity
6. Design system improvements that contain health care costs and keep insurance premiums affordable

APPROACH

The state organized its SIM initiative under three umbrellas:²⁸

- Population Health
- Care Delivery
- Technology

Population Health

As part of the SIM initiative, Michigan established five community health innovation regions (CHIRs) scattered across the state. Three of the CHIRs were comprised of a single metropolitan county, one CHIR was comprised of two metropolitan counties, and one CHIR was a regional collection of six small metropolitan and four nonmetropolitan counties. Organized by a neutral backbone organization, CHIRs were designed to focus attention and resources on addressing social determinants of health. A CHIR was a unique model used for improving the wellbeing of a region and reducing unnecessary medical costs. CHIRs engaged a broad group of stakeholders to identify and address factors that affect residents' health, such as housing, transportation, and food insecurity, as well as access to high-quality medical care.³⁰ The CHIR Partners backbone organization facilitated the development and implementation of key strategies, creating the necessary capacity to sustain progress on stated objectives. With an overall mission to align priorities across health and community organizations, CHIRs assessed community needs, defined regional health priorities, supported regional planning, and increased awareness of community-based services, and increased clinical-community linkages.²⁸ Each CHIR established a hub, which served people identified as needing assistance with social determinants of health.²⁸ Referrals came into the hub from community-based organizations and primary care providers.

Lack of housing support was identified as a significant problem within the CHIRs. The state's Department of Health and Human Services, in tandem with the state's Housing Development Authority and others, responded by launching the "Health through Housing" Initiative.²⁸ This initiative aimed to reduce barriers to housing by building an integrated partnership between the healthcare and housing communities. The Michigan Department of Health & Human Services (MDHHS), along with the Michigan State Housing Development Authority and Michigan Coalition Against Homelessness, launched a multifaceted approach to provide permanent housing solutions for the homeless identified within each

CHIR.²⁸ Their four-component approach used data analytics to identify vulnerable residents, built provider capacity, improved local homeless response systems, and conducted a frequent-user pilot. Additionally, sources of funding were identified to support and sustain this effort in improving local homeless response systems.²⁸

Additional plans to target social determinants of health included:²⁸

- Establishing practices within the care delivery system which identified needs and linked patients with community services.
- Creating stronger linkages between clinical and community services and settings.
- Working to improve community conditions so that the environments in which people lived promoted health, inclusive of the physical, service, social, and economic environment.

Care Delivery

The care delivery strategy included two components. First the Patient-Centered Medical Home (PCMH) served as a foundation for healthcare system transformation in Michigan.²⁸ The PCMH initiative initially included 325 primary care practices, representing more than 2,100 primary care providers and 340,000 Medicaid beneficiaries.¹³ During the SIM initiative, participants designed and implemented processes to support primary care clinical-community linkages.²⁸ Second, the state promoted the use of alternative payment models (APM) to incentivize high-quality and cost-effective care.¹³ The MDHHS SIM team, implemented elements of the SIM APM strategy by adopting the Healthcare Payment Learning and Action Network APM Framework as its method for classifying provider payment types. By encouraging payments that “reward providers for outcomes” state contract language specifically noted that payments could cover services promoting “coordinated and appropriate care” not typically reimbursable through Medicaid.³¹

Technology

Michigan’s Relationship and Attribution Management Platform (RAMP), program created a linkage supporting care coordination and identifying relationships between patients and providers.²⁸ RAMP was designed to coordinate multiple aspects of care management and operations, including healthcare provider registries, systems for tracking active care relationships between patients and healthcare providers, sharing quality-related data and performance results, and notification of hospital admissions and discharges. Additionally, the Michigan Health Information Network implemented the Quality Measure Information (QMI) use case²⁸ enabling payers such as Medicaid to access and view quality measures across providers.

RESULTS

The Michigan SIM initiative produced several key results:

- The initiative’s emphasis on social determinants of health was generally seen as a positive development for the state. It also highlighted the limited resources available for addressing social needs.¹³
- Using SIM-funded one-time investments, the state integrated operations of several health information exchanges to facilitate health data coordination.¹³ This was achieved through leveraging RAMP to take advantage of a widespread network of networks to increase interoperability and support the goals of the initiative.²⁸
- The state’s Medicaid Health Plans implemented APMs and made progress moving to more advanced APMs.

MINNESOTA (ROUND 1, \$45 MILLION)

FEBRUARY 2013 – DECEMBER 2017

GOALS

Minnesota identified the following goals for the State Innovation Model (SIM) award, to be achieved by the end of 2017:³²

1. Ensure every Minnesotan has the option to receive team-based, coordinated patient-centered care that increases and facilitates access to medical care, behavioral health care, and other services while lowering costs.
2. The majority of providers participate in an Accountable Care Organization (ACO) or a similar model that holds them accountable for costs and quality of care.
3. The alignment of financial incentives for providers across payers promoting increased access, improved quality, and reduced costs.
4. Communities, providers, and payers have started implementing new collaborative approaches to setting and achieving clinical and population-level health improvement goals.

APPROACH

The Minnesota approach included:³³

- Health IT
- Integrated Health Partnerships
- Practice Transformation
- Accountable Communities for Health

Health IT

The Minnesota Accountable Health Model invested in e-health to increase care coordination, quality improvement, and providers' ability to securely exchange data for treatment purposes. Minnesota's SIM funding supported three main areas of e-health:

1. Privacy, security, and consent management for electronic health information exchange grants to:
 - ensure health care professionals have access to education and technical assistance on privacy, security, and consent management practices.
 - identify opportunities for improvement in current patient consent processes.
 - share health information in a safe and secure manner that is consistent with both state and federal law.
2. E-health community collaborative program engaging ACOs or other organizations with experience in value-based models to support the secure exchange of medical and health-related information.
3. E-health roadmap to advance the Minnesota Accountable Health Model in four priority areas: behavioral health, long-term and post-acute care, local public health, and social services.

Integrated Health Partnerships

Prior to the current Minnesota Accountable Health Model, the Minnesota Department of Human Services' (DHS) Medicaid ACO demonstration (referred to as Integrated Health Partnerships, IHP) was a testing ground to provide partnerships with better data analytics to lower health care costs and improve quality of care.

As part of the SIM effort, the IHP program was expanded to include innovative investments in provider alternative payment arrangements:

- Population-based prospective care coordination payment
- Exchange of electronic clinical event notifications between IHPs and providers
- Contract incentives to strengthen partnerships with community supports and social services organizations
- Increase system accountability for patient population health outcomes

Practice Transformation

A variety of tools were used to foster practice transformation under the Minnesota model:⁵

1. Emerging professions integration grant and toolkit – Used to hire emerging professions such as Nurse Assistants and Physical Therapists and integrate them into the workforce; and, provided information to potential employers about hiring emerging professions practitioners and successfully integrating them into care coordination models.
2. Practice transformation grants – Provided direct funding to primary care, behavioral health, and other providers integrating primary care, behavioral health, and social services.
3. Practice facilitation grants – Provided executive coaching and leadership training, organizational assessment, and training for more professions to serve in patient-centered teams.
4. Learning communities’ grants – Granted funding to help integrate behavioral health services with primary care, integrate pediatric care with behavioral health, and conduct quality improvement activities in rural practices.
5. Oral health access grant – Given for activities to improve oral health access and preventative care for health centers in urban and rural areas.

Accountable Communities for Health

Accountable Communities for Health (ACH) supported three main areas of investment:

1. Accountable Communities for Health – Supported community-based care coordination and population-based prevention strategies to address community health care needs.
2. The Accountable Communities for Health Learning Collaboratives – Provided technical assistance and facilitated peer learning between 15 Accountable Communities for Health to increase knowledge and capabilities related to patient-centered, coordinated, and accountable care.
3. Accountable Communities for Health Expansion Grants – Supported health models, and services and support systems that have positive effects on health and promote sustainability.

RESULTS

The State Health Access Data Assistance Center (SHADAC) at the University of Minnesota School of Public Health was contracted to conduct the state evaluation of Minnesota’s SIM initiative. A synopsis of the SHADAC report follows:³⁴

Health IT

- Providers reported implementation of health IT improved continuity of care. Care teams reported timely sharing of information among teams resulted in reduced hospitalization.

- Health IT reduced administrative costs for providers. Providers interviewed by SHADAC thought that their organization’s administrative costs associated with printing, faxing, and mailing were reduced because of investment in health IT.
- Health IT helped strengthen relationships between collaborative partners. Providers interviewed by SHADAC thought that they had increased their knowledge of the role played by collaborative partners in the community and the data available to them.
- The number of state certified Health Information Exchange organizations increased significantly because the state required SIM grant recipients to connect to a state certified health IT service provider to allow electronic exchange of data. As of 2017, there were 20 organizations certified as health information organizations, or health data intermediaries.

Integrated Health Partnerships

- The number of SIM organizations participating in Alternative Payment Method (APM) arrangements increased. In a survey of 77 SIM awards recipients, 31 percent reported an increase in their level of APM participation.
- According to state actuarial analysis, cost savings and shared savings for IHPs resulted in \$212.8 million in total cost savings between 2013 and 2016.
- Inpatient costs were reduced after the implementation of IHP and ACO alignment.

Practice Transformation

The number of patients with disabilities receiving high quality, patient-centered, coordinated care increased. The certified health care homes program funded through the SIM grant provided a platform where providers, families, and patients worked together to improve the quality of life and health outcomes for people with complex health conditions.

- SIM grantees reported an increase in care coordination capacity. A survey of 38 organizations participating in SIM team-based coordinated care programs found that 85 percent of respondents thought that their organization’s care coordination abilities were somewhat or much better than before the implementation of SIM practice transformation.
- SIM grant recipients were able to increase data collection abilities. SIM grant funds allocated for practice transformation were used to develop new data collection activities to support care coordination and improve the quality of care.
- Providers reported that their communications were improved, both within organizations and with external providers, after the implementation of practice transformation activities.

Accountable Communities for Health

- The ACH strengthened collaborations and partnerships among partner organizations and providers. Out of 70 organizations surveyed, 89 percent believed that there was an increase in the number of collaborations resulting from ACH under SIM.
- The quality of care was improved with 78 percent of survey respondents reporting that they believed that this was the result of the ACH care coordination processes.
- ACH participants reported a sense that the activities improved social determinants of health with 84 percent of surveyed providers indicating that they would continue to participate in the ACH care coordination processes.
- The vast majority of surveyed providers (80 percent) indicated that patient health outcomes and utilization indicators percent improved because of ACH under SIM.

NEW YORK (ROUND 2, \$99.9 MILLION)

FEBRUARY 2015 – JANUARY 2020

GOALS

The New York SIM initiative aimed at transforming its health systems from a reactive, volume-based approach to a proactive value-based system. The state adopted an Advanced Primary Care Model (APC) designed to provide optimal health delivery at lower cost.⁹ The APC is a tiered primary care model that integrates behavioral and population health by complementing it with a strong workforce, transformation of payment mechanisms through value-based payments (VBP), and advancements in information technology. The APC also has a strong focus on transformation of primary care practices through a model known as New York Patient-Centered Medical Homes (NYS PCMH).¹¹

APPROACH

The New York SIM included four specific aims:

- Incentivize primary care practices to adopt a PCMH model of care.
- Expand the use of value-based payments so that 80 percent of all care was delivered in VBP models by 2020.
- Advance information technology and developing quality metrics, analytics and a common scorecard to make sure that the delivery system and payment models supported the objectives of the APC.
- Sustain the efforts.¹¹

New York's Patient-Centered Medical Homes

The main objective of the NYS PCMH was to encourage small practices to adopt the patient-centered medical home model to improve care delivery. A customized model was built based on the quality standards set by the National Committee for Quality Assurance (NCQA) and incorporating several state specific requirements.¹¹ The state incentivized small primary care practices to adopt the model. The state launched the Practice Transformation Agent (PTA) program that focused on the recruitment of primary care practices and provision of technical assistance to help them adopt and achieve PCMH certification.¹¹ By the end of the SIM initiative, NYS PCMH had enrolled 2,879 practices.¹³ In order to address primary care shortages in rural areas, three new rural residency programs were launched to address primary care shortages and virtual clinical sessions were introduced through Extension for Community Health Outcomes (Project ECHO) program.¹³

Transformation of the payment systems

Because of high market variation, New York took a regional approach to commercial payer collaboration. Four different Regional Oversight Management Committees (ROMCs) were established to achieve voluntary commercial payer alignment with a VBP model. Recognizing that financial support from one payer might not be sufficient to support small providers seeking certification, commercial payers worked in collaboration to provide incentives to small providers throughout the process of NYS PCMH certification. The regional approach in New York resulted in more flexibility amongst payers in deciding payment approaches and identifying practices requiring financial support based on the local market conditions.

Advancement in Information Technology and data analytics

New York established the Statewide Health Information Network for New York (SHIN-NY) as a key tool for primary care clinicians to access information related to their patients' medical histories, other provider interactions, diagnostic results, and prescription fills. Other SIM-supported health IT projects included construction of a comprehensive provider directory (including information on licensure and accreditation) and practice scoreboards using data from the State's All Payer Database.¹⁵

Sustainability of the efforts

New York planned to sustain the NYS PCMH program without the PTAs. The workforce development programs (such as the rural residency programs) were expected to continue as self-sustaining programs.¹¹ It was hoped that payers would fund ROMCs.

RESULTS

The following outcomes are reported for the New York SIM program:

New York's Patient-Centered Medical Homes

- PTAs had challenges engaging practices and many eligible practices remained unwilling to seek NYS PCMH recognition. By the end of the 2020, only about 50 of the 700 groups targeted statewide had achieved NYS PCMH recognition and were able to execute VBP contracts with a participating payer.¹⁵
- Spending per person per month was reduced approximately \$53.86 for commercially insured patients of NYS PCMH providers compared to commercially insured patients of non-PCMH providers. This was the result of a larger decline in inpatient admissions among the NYS PCMH providers compared to non-PCMH providers.¹⁵
- Although the NYS PCMH model facilitated mental health screening, diagnosis, and treatment, behavioral health visits increased for patients of both NYS PCMH providers and comparison providers. But the increase in visits in the NYS PCMH group was slightly lower.¹⁵
- Through Project ECHO, primary care providers at 171 sites in areas where specialty care providers were not readily available participated in continuing education sessions.¹³

Payment transformation

- Many practices found the implementation of VBP to be challenging. The practices felt they lacked financial expertise to make informed decisions regarding participating VBP contracts.¹⁵
- Estimates vary by type of payer and geographic location, but the state achieved VBP penetration of only 50 percent.¹⁵

Information technology

- The state used SIM funds to offer a \$13,000 grant for primary care practices to cover the costs of connecting to the SHIN-NY system. But fewer than 40 practices took the grant support. It is believed that these small grants were insufficient (especially for small systems) to offset the high setup costs and high annual fees.¹⁵
- In 2019, the participation rate in the SHIN-NY system ranged from 100 percent among hospitals to 53 percent among primary care practitioners.¹⁵
- Technical issues plagued the development of the scorecard, and it was not universally adopted by practices.¹⁵

Sustainability

- Eighty percent of the SIM initiative funds in New York were used to pay PTAs and those payments were discontinued at the end of the SIM award period. Recruiting new practices to achieve PCMH certification without free PTA support now depends on payer incentives and on evidence demonstrating the benefits of the model to providers and payers.¹⁵
- The COVID-19 pandemic led to some budget shortfalls resulting in the removal of many New York SIM initiatives.¹³

OHIO (ROUND 2, \$75 MILLION)

FEBRUARY 2015 – MARCH 2019

GOALS

The state of Ohio aimed to transform its health care systems by enrolling over 80 percent of its residents in a value-based payment model using two key strategies. The first was patient-centered medical homes (PCMHs) known as Ohio Comprehensive Primary Care (CPC). The second was the episode of care (EOC) model. Both models were designed to control cost and utilization with the help of coordinated care while focusing on management of chronic diseases.³⁵ The Medicaid Managed Care Plan in Ohio was required to implement both the Ohio CPC and EOC models. Ohio also prioritized the development of crosscutting infrastructure to scale up and sustain the planned operations.⁹ For this purpose, they developed a method of engagement for collaboration including within Ohio Department of Medicaid (ODM), other agencies, providers, Medicaid Managed Care Plans, and commercial payers.³⁵

APPROACH

The Ohio SIM included four specific aims:

5. Expanding the Ohio CPC to achieve statewide coverage by 2018.
6. Implementing up to 50 episodes of care.
7. Incorporating population health related measures into regulatory and payment systems across clinical services and community-based initiatives.
8. Sustaining the efforts.⁹

Ohio Comprehensive Primary Care

CPC is a form of patient-centered medical home program that provides well-coordinated patient-centric care. Ohio's goal for the CPC program was to provide resources and incentives to its primary care providers, enabling them to deliver required care to patients in a cost-effective manner.³⁵

The CPC model was focused on the Medicaid market and the state partnered with Medicaid Managed Care Organizations (MCOs) for its administration. To set quality standards for CPC, the state aligned with criteria set by the National Committee for Quality Assurance (NCQA). The alignment with a credible and established model made it possible for Ohio to recruit practices participating in other complementary models. Ohio therefore was successful in recruiting larger and more advanced practices participating in complementary models such as CPC+.¹³

Episodes of Care

The EOC model focused on delivery of care in a cost-effective manner for health events. Each episode includes diagnostics and curative services from multiple providers.¹¹ The entity responsible for the coordination of all the services related to a health event is known as a principal accountable provider (PAP). The model is based on value-based payment where physicians and specialists have opportunity to earn savings based on certain quality measures and the total cost of the services received by the patient for the health event. Ohio required its MCOs to implement the EOC and CPC models but also implemented the EOC model in the Medicaid fee-for-service (FFS) program.¹³

Episodes were selected and prioritized for implementation based on criteria that included size, relevance to Medicaid and other populations, and potential sources of value along the patient journey. In 2016 asthma exacerbation, COPD exacerbation, and perinatal were included as episodes. Six more

episodes were added in 2017 including cholecystectomy, upper respiratory infection, GI bleed, urinary tract infection, colonoscopy, and esophagogastroduodenoscopy (EGD). This raised the total number of EOCs to 9 diseases.³⁵

ODM determined the cost of each episode, set all quality standards, and calculated all PAP incentives and penalties. The program follows a retrospective payment model where the payments are made based on value after the services are delivered. Financial incentives tied to episodes of care are evaluated through member-level data that reports on the quality metric performance and average risk-adjusted episode spending. A PAP becomes eligible for a positive incentive payment after having at least 5 valid episodes of care within one performance period. The spending must fall below a set “commendable” threshold, and the episode should meet all the standards set for the quality of care. If the spending is above the defined threshold, the PAP is subject to a negative incentive payment.³⁵

Population Health

With the help of the integration of the VBP, EOC, and CPC models, Ohio sought to build a healthier population – residents who are healthy and productive at every stage of life. The state incorporated population health indicators into a value-based payment system to align population health priorities across all health care services.³⁵ In this regard a school-based health care initiative (known as “school-based health care tool kit”) was launched.¹¹ The idea was to allocate resources to schools and communities so that they can work together to address student health care issues and remove development and growth hurdles.^{11,15} Other Ohio population health activities involved development of online resources including a database of population health indicators, a repository of local health, community benefit hospital needs assessments, and a community benefit hospital spending plans.^{13,15}

Sustainability of the efforts

To sustain the SIM efforts, ODM embedded the value-based payment system into its ongoing operations as well as its future planning. Strategies have been identified to continue to embed the CPC and EOC models in the state health care ecosystem after the SIM grant period ends.¹³

RESULTS

Ohio’s SIM initiative produced the following outcomes:

Ohio Comprehensive Primary Care:

- By 2019, Ohio included 250 practices in its CPC program, leading to coverage of 50 percent of the Medicaid beneficiary population.⁹
- There was gradual improvement in the overall quality of the CPC. Based on a composite view of performance scored by practices on assigned clinical quality measures, the annual performance of the CPC practices improved by 2.2 percent from 2015 to 2017.³⁵ A majority (95 percent) of CPC practices met requirements of the quality and efficiency thresholds by 2017.¹⁵
- After meeting the size requirement for shared saving eligibility, five out of thirty-four practices received a combined total of \$11.2M in shared savings payments.¹⁵
- CPC practices had a 1.9 percent risk-adjusted total cost of care per member per month trend compared to a non-CPC control group. This resulted in net annual savings of \$78.1M.¹⁵

Episodes of care models

- Low PAP engagement in the EOC model was seen as a persistent challenge in Ohio because most of the providers were not able to access online performance reports on EOC cost and quality measures.¹³
- In 2017 nine Episode PAPs were assessed for quality thresholds and 74 percent met all of the quality criteria. Over half (54.1 percent, 1.6 million) of Ohio Medicaid beneficiaries were in an episode.³⁵
- Estimated net EOC savings (calculated by subtracting net incentive payments from gross annual savings) ranged from \$32.1-92.5M.¹⁵
- For the performance year 2017, PAPs received \$4.0M in total positive incentive payment for all nine episodes and incurred \$4.2M in negative incentive payment.³⁵
- In 2019 after the SIM initiative ended, ODM reduced the number of Episodes from 43 to 30 with the intention of focusing on high-value episodes for the Medicaid population.³⁵
- Ohio improved patient engagement among Medicaid covered children with school district collaboration by launching 17 Ohio school-based health care initiatives. The catchment areas these initiatives covered included approximately 33,000 Medicaid beneficiaries.¹⁵
- In 2019-20, Ohio also released a new State Health Assessment and Statewide Healthcare Innovation Plan for the alignment of the CPC, EOC and population health priorities.¹⁵

Sustainability

- The state of Ohio used the CPC model to launch a new track “CPC for kids” by using state resources.⁹
- The EOC payments were suspended with the COVID-19 pandemic. ODM planned that the EOC payments will resume in 2022.³⁵
- Ohio also decided on the continuation of CPC and the EOC model as requirements in the new Medicaid managed care procurement released in September 2020.³⁵

OREGON (ROUND 1, \$45 MILLION)

SEPTEMBER 2012 – SEPTEMBER 2016

GOALS

The goal of the Oregon State Innovation Model (SIM) grant was to strengthen and support the state's coordinated care model and to begin implementing its key elements. This was to be accomplished by restructuring the state's existing care model and the health systems' business model to better manage and coordinate care. SIM funds were used to strengthen existing systems and to improve care.⁵

APPROACH

Oregon used SIM funds to strengthen its delivery system and promote change. Specific elements were.⁵

- Innovation and Rapid Learning
- Delivery System Innovation
- Patient-Centered Primary Care Home Program (PCPCH)
- Payment Models
- Health IT Infrastructure
- Quality Measurement and Reporting

Innovation and Rapid Learning

SIM grant funds were used to provide resources and technical assistance to Oregon's 16 Coordinated Care Organizations (CCOs) and to spread major elements of the model to other payers and populations. Strategies included launching the Transformation Center as a vehicle for stakeholder engagement and expanding the PCPCH program. The Transformation Center facilitated learning, shared innovation practices, provided direct technical assistance on topics such as behavioral health, and primary care, and promoted adoption of alternative payment models.

Delivery System Innovation

The Oregon Health Authority, in collaboration with major stakeholders in the state, developed a plan to reform Oregon's Health care system. They used SIM funds to support the Coordinated Care Model (CCM) as its vision for better health care. The major attributes of the model included.³⁶

- Using best practices to manage and coordinate care
- Sharing responsibility among providers, payers, and health consumers
- Increasing transparency in price and quality
- Measuring performance
- Paying providers for better quality care and health
- Achieving a sustainable rate of health care expenditure growth

Patient-Centered Primary Care Home Program

The PCPCH was Oregon’s version of the medical home model. Oregon established a PCPCH standards advisory committee which defined six core attributes:

- Access
- Accountability
- Comprehensiveness
- Continuity
- Coordination and integration of services
- Person-and-family-centered approach

Payment Models

Payment model reform included plans to spread CCM features through qualified health plans offered on the state’s Health Insurance Marketplace. The Patient-Centered Primary Care Homes that Oregon developed were scattered among the state’s 16 CCOs. State officials viewed PCPCH as a foundation to the success of CCOs. They used SIM resources to provide technical assistance to PCPCHs to upgrade their capacity. The advantages of the CCOs are that they are local and are accountable for the health outcomes of the population they serve. They are governed by a partnership of health care providers, community members, and other stakeholders in the health system. They integrated behavioral health services with primary care by establishing contractual agreements with behavioral health providers. The state also promoted payment reform in primary care by requiring all payers to spend a set percentage of their overall spending on primary care services.³⁷

Health IT Infrastructure

The state invested significant resources in health IT. This was seen as essential for the support of the CCM in the collection and exchange of patient information for care integration, coordination of services, and monitoring of quality. SIM funds also financed planning for robust and financially sustainable state health IT services to support coordinated care. The state’s Emergency Department Information Exchange was implemented in all Oregon hospitals with a goal of identifying frequent users of emergency department services and to help direct them to appropriate care settings. The state also made SIM funds available to support five telehealth pilots and expanded capacity for videoconferencing between primary care providers and specialists as a solution to health care professional shortages in rural communities.

Quality Measurement and Reporting

The state devoted significant SIM resources to support Oregon Health Authority (OHA) data analytics capability. Data analytics included collecting and analyzing CCO metrics and generating regular reports to improve performance and care for patients. The state tracked CCO performance to demonstrate the success of CCM and encourage commercial payers to adopt the model and establish it as a standard care model for all state residents.

RESULTS

Oregon surpassed its goal of expanding the PCPCH and succeeded in its goal of spreading CCM beyond Medicaid. As of March 2017, 67 percent of eligible primary care providers were practicing in 659 PCPCH clinics. Other outcomes of the SIM project included:⁵

- The state leveraged its purchasing power to implement selected elements of the CCM in health plans offered to state employees and educators accounting for 6 percent of the state's population.
- By March 2017, 83 percent of the state's providers were reported to be engaged by CCOs.
- CCOs served 85 percent of all Medicaid enrollees and 54 percent of Medicare-Medicaid enrollees.
- The state reported that 97 percent of state employees were enrolled in health plans with CCM features. But most of those opted to remain in plans with the least restrictive network, therefore limiting the CCM impact on cost and quality.
- By the end of 2016 only 35.9 percent of payments CCOs made to providers were not fee-for-service, falling short of the state goal of 57 percent by end of the SIM's test period.
- Integration of behavioral health with primary care were significant, resulting in increased screening for depression, and drug and alcohol misuse.
- All Oregon Acute Care hospitals were connected and had access to the real-time ED notification system through SIM funding.

VERMONT (ROUND 1, \$45 MILLION)

FEBRUARY 2013 – JUNE 2017

GOALS

The Vermont State Innovation Model (SIM) plan reforms Vermont's health care system through care integration, payment reform, and financial incentive promoting value-based care. The overall goal is the Institute for Healthcare Improvement's Triple Aim: better care, better health, and lower health cost.³⁸

APPROACH

The model builds on pre-existing programs to expand and improve care coordination, value-based payment reform, and health data infrastructure. The Vermont Health Care Innovation Project (VHCIP) was established to execute the SIM plan. The Vermont State Regional Care Collaboratives (RCCs) developed partnerships with three Accountable Care Organizations (ACOs) – Community Health Accountable Care, Vermont Collaborative Physicians, and OneCare Vermont – to support state-wide collaborative structures. Those organizations focused on three principal strategies: redesigning payment models, practice transformation, and creating a supporting health data infrastructure.³⁹

Payment model design

During the four years of SIM funding the VHCIP:⁴

- Developed and recommended standards for Vermont-specific Medicaid and Commercial Shared Savings Programs and Medicaid pay-for-performance models.
- Researched and developed Episodes of Care payments models, but ultimately decided not to pursue the model.
- Worked with ACOs to build their infrastructure and provider capacity through funding of health care systems that will enhance alternative payment models
- Aligned quality measures across payers to facilitate collection and reporting.
- Implemented two new Shared Savings Program (SSP) ACOs: a Medicaid SSP, and a Commercial SSP. The ACOs were eligible to receive a portion of any savings if they met performance quality measures.

In addition, special initiatives addressed specific needs. For example, a Health Home initiative addressed needs of Medicaid beneficiaries with opioid addiction. The initiative was supported by two payment models: a bundled monthly rate for central hubs and a capacity-based payment for primary sites (spokes). Similar programs within the Medicaid program included Community Health Teams, and Support and Services at Home. VHCIP worked on a Medicaid pathway model, a planning process designed to systematically review payment models and delivery system expectations; and to support integration of physical health, long-term services and supports, mental health, and substance use disorder treatment.⁴⁰ The model also included integrating long-term services and supports, and other specialized services, into the continuum of care to improve beneficiary outcomes.

Practice transformation

Projects to foster practice transformation included:

- Supporting learning collaboratives of Vermont providers to share best practices
- Training for front-line care coordinators
- Supporting regional collaborations to reform health care

- Supporting a Care Models and Care Management Work Group which surveyed staffing levels and types of personnel engaged in care management
- Assessing provider supply to predict supply trends and inform strategic planning

Health Data Infrastructure

The goal of the Vermont SIM plan included guided investments in the expansion and integration of Information Technology.⁵

- VHCIP worked to expand the development of Electronic Health Records (EHR) and other data systems to support the integration of services.
- Gaps in infrastructure connectivity were addressed and robust clinical data reporting was supported through Vermont’s Health Information Exchange (VHIE).
- The VHCIP developed two tools to support better communication: the Blueprint Clinical Registry, and the Patient Ping event notification system. Blueprint Clinical Registry included a data entry portal for self-management support programs and tobacco cessation programs. Patient Ping was an electronic notification system to alert providers when their patients have been admitted or discharged from the emergency department or changed care setting.
- Two telehealth pilots were launched – one to facilitate medication-assisted treatment for patients with opioid addiction, and the other to link visiting nurse organization telemonitoring system data with VHIE.

RESULTS

The state’s final SIM report identified the following results.³⁹

Care Integration

- As a result of care integration, Medicaid beneficiaries in Vermont had substantially lower rates of utilization relative to comparison groups.
- Commercially insured Vermont residents had lower rates of visits to primary care providers and some specialists. Visit rates increased for some specialists.
- Vermont SIM-supported quality of care measures – hospitalization rates and mammography screening – saw improvements.
- Pharmacy spending for commercially insured residents decreased.

Payment Reform and Financial Incentive Structures

- As of December 2016, the state’s ACO model served 46 percent of the Medicaid population, 13 percent of the Commercial population, and 44 percent of the Medicare population.
- Vermont SIM initiative reported that as of December 2016, Patient-Centered Medical Homes reached 70 percent of the Medicaid population, 37 percent of the Commercial population, and 59 percent of the Medicare population.
- Vermont included a new population health measure in its all-payer ACO model. The measure, Accountable Communities for Health Model, focusses on all patients’ health within a certain geographic area.
- As of December 2016, 996 providers participated in the Medicaid SSP, and 1,105 providers participated in the commercial SSP.

Health Data Infrastructure

- The Patient Ping event notification system was used by one ACO, all 14 Vermont hospitals, 16 skilled nursing facilities, and more than 250 individual practices at the end of the SIM initiative.
- SIM funding improved the transfer of data among Vermont's payment programs, coordination of patient care, and measurement of quality metrics.
- Lack of interoperability prevented most providers from using VHIE. In a state-funded evaluation of VHIE, 91 percent of providers believed that VHIE was critical for Vermont, but only 19 percent thought it was meeting the needs of their organization.
- The state focused on implementing a behavioral health data repository through EHR expansion, and Health Information Exchange connectivity.

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